

**Remarks**

Embodiments of the present invention include methods of coating or painting one or more external vertical walls of a building with a heat reflective wall paint which has at least one heat reflective metal oxide pigment comprising a solid solution having a corundum-hematite crystal lattice structure. Applicant has surprisingly discovered an advantageous reduction in energy consumption which can be achieved via methods in accordance with the present invention.

Claims 1-3, 5-23, and 30-37 are pending and under active prosecution. The **Listing of Claims** with appropriate status identifier begins on page 2 of this communication.

The arguments presented herein and the new data in the form of three declarations under 37 C.F.R. §1.132 submitted herewith are respectfully submitted to place the application in condition for allowance, or at a minimum, in better condition for appeal. In particular, the arguments and new data submitted herewith should result in no additional search or examination burden for the Examiner. Accordingly, entry of the arguments and declarations provided herewith is respectfully requested.

**Claim Rejections – 35 U.S.C. §103**

The current Office Action makes seven rejections in total, each under 35 U.S.C. §103(a), and all of which rely, either alone or in combination with additional references, on the rejection over Sliwinski *et al.* (US 6,454,848), in view of Krauthauser *et al.* (US 5,962,143) or Yanagimoto *et al.* (US 6,521,038).

These rejections under 35 U.S.C. §103(a) as allegedly being obvious over Sliwinski *et al.* in view of either Krauthauser *et al.* or Yanagimoto *et al.*, are respectfully traversed.

**Initially, Applicant reiterates all previous arguments against the combination of Sliwinski *et al.*, Krauthauser *et al.*, and/or Yanagimoto *et al.*, and further provides additional arguments set forth below that no case of *prima facie* obviousness has been satisfactorily established. Moreover, even if the satisfactory establishment of a *prima facie* case of obviousness is assumed, for argument's sake, Applicant respectfully asserts that the present invention is not ultimately obvious over Sliwinski *et al.* in view of the secondary references (*i.e.*, Krauthauser *et al.* or Yanagimoto *et al.*) based on the new data set forth in the Declarations of Jay Haines, Julie Mowery and Andre Desjarlais evidencing indicia of non-obviousness; *i.e.*, commercial success and greater than expected results. See *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966); MPEP §716.02(a). Accordingly, Applicant respectfully requests reconsideration in view of the remarks which follow.**

**Well-Settled Criteria for Establishing Prima Facie Obviousness Have Not Been Satisfied:**

To establish a *prima facie* case of obviousness, three criteria must be met: there must be some motivation or suggestion, either in the cited publications or in knowledge available to one skilled in the art, to modify or combine the cited publications; there must be a reasonable expectation of success in combining the publications to achieve the claimed invention; and the publications must teach or suggest all of the claim limitations. See MPEP §2142. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 493; 20

USPQ2d 1438, 1442 (Fed. Cir. 1991); see also MPEP §2142. In analyzing obviousness, the Court of Appeals for the Federal Circuit has repeatedly cautioned that:

[t]he factual inquiry... must be based upon objective evidence of record.... [T]he best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.... [P]articular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed invention, would have selected these components for combination in the manner claimed.

*In re Sang-Su Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002), 61 USPQ2d 1430, 1433 (internal citations omitted).

Rejections Based on Sliwinski et al. in view of Krauthauser et al.:

The rejection of Claims 1-3, 5-17, 20-23, and 36-37 under 35 U.S.C. §103(a) as allegedly being unpatentable over Sliwinski *et al.* in view of Krauthauser *et al.* is respectfully traversed. Contrary to the Examiner's assertions, Krauthauser *et al.* does NOT remedy the acknowledged deficiencies of Sliwinski *et al.*

The instant invention is based on the novel concept that coating one or more external vertical walls of a building with a paint that has a heat reflective metal oxide pigment comprising a solid solution having a corundum-hematite crystal lattice structure can reduce energy consumption required to cool the interior of the building. Sliwinski *et al.* discloses pigments with a corundum-hematite crystal lattice structure; however, as the Examiner acknowledges, Sliwinski *et al.* does not teach applying/coating a paint onto the external vertical wall(s) of a building (Final Rejection, page 3, last two lines).

In an attempt to meet this missing claim element, the Examiner asserts (Final Rejection, page 4, lines 1-2) that Krauthauser *et al.* teaches that "heat reflective paints are used to coat the exterior façade (i.e., external vertical wall(s) of buildings (Col. 5, lines 3-35) ..." and alleges that it would be obvious to combine the references to arrive at the presently claimed invention (Final Rejection, page 4, paragraph 2). The Examiner further asserts (Final Rejection, page 13, second paragraph) that the term "façade" is taken in the broadest possible meaning to mean "the face of a building."

Contrary to the Examiner's assertion regarding the term "façade," Krauthauser *et al.* only uses this term narrowly in the context of "façade elements," in reference to *elements* such as window and door *moldings* or other decorative *pieces*. That is, the term "façade" is used only twice within Krauthauser *et al.* (*i.e.*, Col 1, line 17; Col. 5, line 15), and each time the term is used as an adjective modifying the term "elements." Applicant respectfully submits that the "façade elements" mentioned by Krauthauser *et al.* are not the same as an external wall as the Examiner appears to infer. In this regard Krauthauser *et al.* describes plastic façade elements that can become damaged by heat (*i.e.* "damage such as cracks, reduction in gloss and colour fading"). Column 1, lines 17-20. Applicant respectfully submits that one of ordinary skill would understand that such plastic "façade elements" do not refer to an external wall of a building *per se*, as the Examiner asserts, but instead refer to elements made of plastic that may be present on an external wall such as decorative features (*i.e.* moldings, pillars, and the like), lighting elements, or mailboxes. Thus, Applicant respectfully submits that a "façade element" is not synonymous with, nor even analogous to, an external wall of a building, and therefore Sliwinski *et al.* and Krauthauser *et al.*, alone or in combination, fail to disclose the claim element of the instant claims which recites coating one or more external walls of a building with a heat reflective wall paint that comprises at least one heat reflective metal oxide pigment comprising a solid solution having a corundum-hematite crystal lattice structure.

However, even if a "façade element" was presumed to be analogous to an external wall, the Examiner still fails to establish a *prima facie* case of obviousness because the Examiner has failed to point to any teaching or suggestion provided in the references that would motivate one of ordinary skill to combine the references, nor has the Examiner provided any showing that one of ordinary skill would have any reasonable expectation that combining the references would successfully achieve the claimed invention.

**Motivation to Combine.** The Examiner asserts (Final Rejection, page 4, second paragraph) that it would be obvious to combine Sliwinski *et al.* with Krauthauser *et al.*. However, the Examiner has failed to point to any specific teachings in either Sliwinski *et al.* or

Krauthauser *et al.* that would motivate one of ordinary skill in the art to combine the pigments of Sliwinski *et al.* with the coating of “façade elements” of Krauthauser *et al.* to arrive at the present invention directed to reducing energy consumption in a building by painting at least one external vertical wall with a heat reflective wall paint comprising a heat reflective metal oxide pigment comprising a solid solution having a corundum-hematite crystal lattice structure.

More specifically, the Examiner summarily concludes that because Krauthauser *et al.* briefly suggests coating plastic façade elements with his silicic acid-containing coating to reduce cracking and fading, that one of ordinary skill in the art would somehow be motivated to coat an external wall of a building with a paint containing a corundum-hematite crystal lattice structure pigment of Sliwinski *et al.* to reduce energy consumption in the building. No specific teaching has been identified by the Examiner as to why one of ordinary skill in the art would be motivated to do with the Sliwinski *et al.* pigment what Krauthauser *et al.* suggests with his silicic acid coating, nor has any teaching been identified which would motivate one of ordinary skill to make the presumptive leap of equating a façade element to an external wall *per se*.

At best, the rejection is a classic case of impermissible hindsight where the Examiner has broken the references into minor elements and put them back together using only the teachings of the instant application as a guide to arrive at the instantly claimed invention.

Claim 1 and those depending therefrom are directed to reducing energy consumption associated with cooling the interior of a building by coating one or more external walls with the paint specified in the claims. In contrast, Krauthauser *et al.* describes the coating of “façade elements” in order to reduce damage such as cracks, reduction in gloss and colour fading. Nowhere does Krauthauser *et al.* provide any teaching or suggestion to coat the “façade elements” present on a building in order to reduce the energy consumption, much less coat an external wall to reduce energy consumption. Thus, because the purpose of coating the façade elements of Krauthauser *et al.* is entirely different than the purpose of painting external vertical walls recited in the instant claims (*i.e.* reducing energy costs associated with cooling the interior

of a building), one would have no motivation to combine and modify Sliwinski *et al.* and Krauthauser *et al.* in order to arrive at the claimed invention.

**Expectation of Success.** As stated above, the methods of the instant invention are based on the novel concept that coating one or more external walls of a building with a heat reflective wall paint comprising at least one heat reflective metal oxide pigment comprising a solid solution having a corundum-hematite crystal lattice structure can reduce energy consumption required to cool the interior of the building. The application provides a detailed description of how to prepare suitable paints for the inventive methods, how to apply the paints to the external vertical walls of a building, and analyses which demonstrate the effectiveness of Applicant's invention. The Examiner has failed to make any showing that prior to Applicant's invention, one of ordinary skill in the art would have a reasonable expectation that merely coating the exterior walls of a building with a heat reflective wall paint comprising at least one heat reflective metal oxide pigment comprising a solid solution having a corundum-hematite crystal lattice structure could successfully reduce energy consumption associated with cooling the interior of the building. Furthermore, there is no enabling teaching in either Sliwinski *et al.* or Krauthauser *et al.* that would give an ordinary skilled artisan any reasonable expectation that merely painting external walls of a building with paint having the claimed pigments could reduce energy costs as compared to a building painted in the same color lacking the claimed pigments.

Rejections Based on Sliwinski *et al.* in view of Yanagimoto *et al.*:

Furthermore, the rejection of Claims 1-3, 5-17, 20-23, and 36-37 under 35 U.S.C. §103(a) as allegedly being unpatentable over Sliwinski *et al.* in view of Yanagimoto *et al.*, is respectfully traversed.

As discussed above, the Examiner acknowledges (Final Rejection, page 3, last two lines) that Sliwinski *et al.* does not explicitly teach applying/coating a paint onto the external vertical walls of a building. In an attempt to fill this claim element missing from Sliwinski *et al.*, the Examiner relies on Yanagimoto *et al.* (Final Rejection, page 4, lines 3-6). Similar to the defects

in the *prima facie* obviousness rejection over Sliwinski *et al.* in view of Krauthauser *et al.* discussed above, the Examiners' rejection over Sliwinski *et al.* in view of Yanagimoto *et al.* is also fatally defective.

In this regard, the Examiner has failed to point to any specific teachings in either Sliwinski *et al.* or Yanagimoto *et al.* that would motivate one of ordinary skill in the art to combine the external wall coating of Yanagimoto *et al.* with the pigments of Sliwinski *et al.* to arrive at the present invention. The Examiner has simply concluded that because Yanagimoto *et al.* coats walls with a specialty composite pigment having a reflective white core material, that it would have been obvious to then provide an external wall paint containing the pigments of Sliwinski *et al.* and coat building walls with such a paint to reduce energy consumption. However, contrary to the Examiner's conclusion, no such motivation exists to combine and modify Sliwinski *et al.* and Yanagimoto *et al.* In particular, not only do the references employ entirely different pigments, but one of ordinary skill in the art would find nothing in Yanagimoto *et al.* which would lead such a person to conclude that other pigments would function in a similar fashion to those specifically described in Yanagimoto *et al.*

At best, this rejection might be classified as "obvious-to-try" under the rationale asserted by the Examiner (Final Rejection, page 4, lines 3-14), but such rationale is not sufficient to substantiate *prima facie* obviousness. MPEP §2145(X)(B). It is simply insufficient for the Examiner to assert that because Yanagimoto *et al.* coats an exterior wall with his inventive composite pigment having a reflective white core material, that it is obvious to coat external vertical walls with any and every other pigment in an attempt to reduce energy consumption. Again, this rejection is a classic use of hindsight in which the Examiner has broken the references into minor elements and put them back together using the instant application as a guide to allege that the combination of references meets the claim elements.

There is no teaching or suggestion in either Sliwinski *et al.* or Yanagimoto *et al.* that would give an ordinary skilled artisan any reasonable expectation that merely painting external walls of a building with paint having the claimed pigments comprising a solid solution having a

corundum-hematite crystal lattice structure could reduce energy costs as compared to a building painted in the same color lacking the claimed pigments. At best, one of ordinary skill in the art would be left to guess what, if any, other pigments might work in conjunction with the teachings of Yanagimoto *et al.* This is clearly deficient in terms of supporting a *prima facie* case of obviousness.

As described above, the Examiner has failed to make any showing that prior to Applicant's invention, one of ordinary skill in the art would have a reasonable expectation that merely coating the exterior walls of a building with a paint that contains a heat reflective metal oxide pigment comprising a solid solution having a corundum-hematite crystal lattice structure could successfully reduce energy consumption associated with cooling the interior of the building. Yanagimoto *et al.* does not provide any teaching that would provide such a reasonable expectation to one of ordinary skill. There is nothing in Yanagimoto *et al.* to suggest to one of ordinary skill in the art that the composite pigments taught therein having a reflective white core material can be replaced with any other pigment. Accordingly, even if Sliwinski *et al.* and Yanagimoto *et al.* are improperly combined, the references still fail to provide a reasonable expectation of successfully achieving the instantly claimed invention.

**All of the rejections are overcome by a showing of secondary considerations**

Even if *prima facie* obviousness over Sliwinski *et al.* in view of the secondary references (*i.e.*, Krauthauser *et al.* or Yanagimoto *et al.*) is assumed for the sake of argument, and the Examiner is inclined to maintain the rejections on that basis, Applicant asserts that any such *prima facie* case of obviousness is sufficiently rebutted by secondary considerations (*i.e.*, indicia of non-obviousness), such as commercial success and greater than expected results, as explained below and evidenced by the data set forth in the Declarations of Jay Haines, Julie Mowery and Andre Desjarlais under 37 C.F.R. §1.132.

Evidence rising out of "secondary considerations" such as commercial success **must always be considered** en route to a determination of obviousness. *Stratoflex, Inc. v. Aeroquip*

*Corp.*, 713 F.2d 1530, 1538, 218 USPQ 871, 879 (Fed. Cir. 1983). See also *Truswal Systems Corp. v. Hydro-Air Engineering Inc.*, 813 F.2d 1207, 1212, 2 USPQ2d 1034, 1038 (Fed. Cir. 1987) wherein the Court states that “[s]ince at least *Graham v. John Deere Co.*, ... the commercial success of a patented invention is clearly important. That evidence is ‘secondary’ in time does not mean that it is secondary in importance.”

To be of probative value, objective evidence must be factually supported by an appropriate affidavit or declaration including evidence of commercial success. See, e.g., *In re De Blauwe*, 736 F.2d 699, 705, 222 USPQ 191, 196 (Fed. Cir. 1984); *In re Lindner*, 457 F.2d 506, 508, 173 USPQ 356, 358 (CCPA 1972); *Ex parte George*, 21 USPQ2d 1058 (Bd. Pat. App. & Inter. 1991). See also MPEP 716.01(c).

Accordingly, Applicant respectfully requests consideration of the attached declarations of Julie K. Mowery, Chief Financial Officer of Textured Coatings of America, Inc. (“Mowery Declaration”), and the inventor Jay A. Haines (“Haines Declaration”), under 37 C.F.R. § 1.132 (attached hereto as Exhibits 1-2, respectively).

**Nexus is established between the claimed invention and evidence of commercial success**

An Applicant asserting commercial success to support a contention of nonobviousness bears the burden of proof of establishing a “nexus” between the claimed invention and evidence of commercial success. *In re Huang*, 100 F.3d 135, 139-140 40 USPQ2d 1685, 1689 (Fed. Cir. 1996); *In re GPAC*, 57 F.3d 1573, 1580 35 USPQ2d 1116, 1121 (Fed. Cir. 1995). The term “nexus” designates a factually and legally sufficient connection between the evidence of commercial success and the claimed invention so that the evidence is of probative value in the determination of nonobviousness. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 7 USPQ2d 1222 (Fed. Cir. 1988).

Applicant asserts that the required nexus exists between the claimed invention and the commercial success of Applicant’s products suitable for use in the methods of the present invention and provides the required evidentiary support in the form of declarations. Specifically,

as evidenced by the Mowery Declaration (Item 4) and Haines Declaration (Item 7), the Supercote™ brand of exterior wall paint produced by Textured Coatings of America, Inc., underwent a change in composition during the life of the product line. Prior to this change, Supercote™ brand exterior wall paints did not contain the infrared reflective pigments described in the above-referenced patent application comprising a solid solution having a corundum-hematite crystal lattice structure. The introduction of these pigments resulted in the paint described and claimed in the present invention and used in the methods of the present invention. The term “Supercote IR” and “Supercote Non-IR” are used herein, as in the Mowery and Haines Declarations, to describe the Supercote™ brand of exterior wall paint either having or lacking the infrared reflective pigments of the present invention, respectively.

Importantly, the only change in composition between Supercote Non-IR and Supercote IR is the addition in Supercote IR of pigments according to the present invention (Haines Declaration, Item 8). Accordingly, superior performance (i.e., commercial success) of the paint of the present invention in the practice of the methods of the present invention is of necessity due to the incorporation of the pigment of the present invention, which pigment comprises a solid solution having a corundum-hematite crystal lattice structure.

As evidenced by sales figures in the period 2000-2006 (Mowery Declaration, Item 3), sales of the Supercote™ brand of exterior wall paint experienced a significant rise in sales volume beginning in 2003, which commercial success is coincident with the introduction of Supercote IR. Indeed, during this period Supercote™ has undergone a sales increase of 2,729% (i.e., from \$148,939 in 2000 to \$4,212,667 in 2006). Furthermore, this increase in sales occurred despite an increase in pricing which accompanied the introduction of Supercote IR (i.e., Mowery Declaration, Item 3). At the introduction of Supercote IR in 2003, the price/gal of Supercote™ increased from \$18.95/gal to \$24.95/gal (i.e., 31.7% increase). Furthermore, in the period 2003-2006, pricing for Supercote IR has increased from \$24.95/gal to \$34.95/gal; i.e., 40.0% increase in price. During the same 2003-2006 period, sales of Supercote™ have increased 261.9% (i.e., from \$1.608 million in 2003 to \$4.214 million in 2006. See Mowery Declaration, Item 6.

As further evidenced in the Mowery Declaration (Items 7-8) the total volume (i.e., gallons) of Supercote™ sold in the U.S. experienced an increase coincident with the introduction of Supercote IR in 2003. Supercote™ total gallons sold increased approximately 98.5% in 2003 over 2002, which increase in unit sales was the result of the introduction of Supercote IR in 2003. Furthermore, Supercote™ total gallons sold has increased 678.7% in the period 2000-2006, and 112.2% in the period 2003-2006, i.e., since the introduction of Supercote IR in 2003.

Accordingly, Applicant asserts that Applicant's paints suitable for use in the methods of the present invention have enjoyed significant commercial success in both total sales and total gallons sold since its introduction, and that increased price has not decreased the enthusiasm of the market, nor is the increased price responsible for the significantly increased sales revenue as evidenced by the total volume of gallons sold.

Gross sales, market share, timing, and expected sales demonstrate commercial success

Gross sales figures do not show commercial success absent evidence as to market share, or as to the time period during which the product was sold, or as to what sales would normally be expected in the market. *Cable Electric Product, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 226 USPQ 881 (Fed. Cir. 1985); *Ex parte Standish*, 10 USPQ2d 1454 (Bd. Pat. App. & Inter. 1988).

As evidenced by the Mowery Declaration (Item 3), the increase in sales for the Supercote™ brand in the period 2000-2006 demonstrate a clear correlation with the introduction of Supercote IR, containing the pigments of the invention, in 2003.

In order to assess the increase in sales of the Supercote™ brand in view of market share, the Mowery Declaration (Items 9-11) further provides annual economic sector data on architectural paints as reported by the U.S. Census Bureau. During the period 2002-2005, the U.S. market for exterior water-type architectural coatings experienced increased sales from \$1.297 billion (2001) to \$1.418 billion (2005), which is an approximate 9.36% increase. The 2005 U.S. Census Bureau figures represents the most recent full year for which sector data on exterior water-type architectural paints are available (Mowery Declaration, Item 9).

Comparison between Supercote™ sales and U.S. Census Bureau figures for exterior water-type architectural paints in the period 2001-2005 are provided by the Mowery Declaration (Items 9-11) which explains that sales of the Supercote™ brand in the period 2002-2005 have undergone an increase of 470% (i.e., from \$568,421 in 2002 to \$3,240,090 in 2005), compared to an increase of 9.36% for the exterior water-type architectural paint sector overall (*supra*). As explained in the Mowery Declaration (Item 9), Supercote™ has experienced increased market share (i.e., Supercote™ sales/exterior water-type coatings sales) every year since 2001 (i.e., from 0.010% in 2001 to 0.228% in 2005). Accordingly, the Supercote™ paint of the present invention has fulfilled the burden of market share comparison under *Cable Electric Product, Inc. v. Genmark, Inc.*

Concerning the timing of sales data in declarations, all sales and expenditure figures provided by the Mowery and Haines Declarations are associated with specific years, thus fulfilling the burden under *Ex parte Standish*.

In order to determine expected sales of the Supercote™ brand of exterior wall paint, the Haines Declaration (Item 9) provides the following assumptions and calculations. As noted in the Haines Declaration (Item 7), because Supercote Non-IR was no longer sold after the introduction of Supercote IR in 2003, sales data before and after 2003 are not the result of an intermingling of Supercote IR and Supercote Non-IR for 2000-2002 and 2004-2006. First, in order to establish a baseline level of sales, the largest sales total (i.e., 2002) in the period 2000-2002 for Supercote Non-IR was taken to arrive at a baseline annual sales of \$568,421/yr. Second, in order to estimate the expected sales for Supercote Non-IR in 2005, it was assumed that absent the introduction of Supercote IR, sales of Supercote Non-IR would have followed the general sales increase observed in the exterior water-type architectural paint market as reported by the U.S. Census Bureau Economic and Statistical Administration. As provided in the Mowery Declaration (Item 11), this market experienced a 9.36% increase in sales in the period 2002-2005. Third, given the assumptions on baseline sales and expected increase, the expected sales for Supercote Non-IR in 2005 would have been \$621,625 (i.e., \$568,421 x 1.0936). As shown in

the Haines Declaration (Item 6), the actual sales of Supercote IR in 2005 amounted to \$3,240,090, which is 421% in excess of the expected sales. Accordingly, the burden for consideration of expected sales under *Ex parte Standish* is fulfilled.

**Advertising expenditures and market leader position do not explain commercial success due to the claimed invention**

Sales evidence must exclude other possible factors which may have resulted in increased sales, such as extensive advertising and position as a market leader before the introduction of the product. See *Pentec, Inc., v. Graphic Controls Corp.*, 776 F.2d 309, 227 USPQ 766 (Fed. Cir. 1985).

Concerning advertising expenditures, as explained in the Mowery Declaration (Items 12-18), the increased sales of Supercote IR over the sales of Supercote Non-IR cannot be explained by extensive advertising or promotion. Indeed, advertising and sales aid expenses for the Supercote™ brand are consistent with advertising and sales aid expenses with other products of Textured Coatings of America, Inc. (Mowery Declaration, Item 17). Whereas sales figures for Supercote IR increased 641.3% in the period 2002-2006 (Mowery Declaration, Item 3), in the same period the total sales of Textured Coatings of America, Inc. increased 45.6% (i.e., from \$11.536 million in 2002 to \$16.795 million in 2006. Accordingly, the increase in sales of Supercote IR is not attributable merely to extensive advertising or promotion, thus fulfilling the burden under *Pentec, Inc. v. Graphic Control Corp.*

Regarding the role of Textured Coatings of America, Inc. as a market leader, the Mowery Declaration (Item 9) explains that in 2005 the total sales of Textured Coatings of America, Inc. amounted to 1.085% of the U.S. market for exterior water-type architectural paint. Furthermore, sales of Supercote IR in 2005 represented a mere 0.228% of the same U.S. market. Accordingly, Applicant respectfully submits that the burden under *Pentec, Inc. v. Graphic Control Corp.* that success must not be attributable to the seller's dominant position in the market is fulfilled.

**Recent changes in related technology or consumer demand do not explain the success of the claimed invention**

Sales evidence must exclude additional factors which may have resulted in increased sales, such as recent changes in related technology or consumer demand. See *In re Fielder*, 471 F.2d 690, 176 USPQ 300 (CCPA 1973).

Sliwinski *et al.*, which the Examiner cites as describing the infrared reflective pigments of the present invention comprising a solid solution having a corundum-hematite crystal lattice structure (Final Rejection, page 3, paragraph 3, lines 1-3), was published on September 20, 2001. The instant application was filed some 2½ years later on March 24, 2004. Thus, the knowledge and availability of the pigments of Sliwinski *et al.* cannot explain the commercial success of Textured Coatings of America, Inc. with respect to the paints of the present invention which are suitable for use in the methods of the present invention, because the pigments of Sliwinski *et al.* were publicly known at least 2-1/2 years prior to the filing of the present application. Accordingly, Applicant has met the burden under *In re Fielder* with respect to recent changes in related technology in a showing of commercial success.

Regarding consumer demand, as described in the Haines Declaration (Item 10), the U.S. market for infrared-reflective paint of exterior vertical walls is small compared with the U.S. market for exterior water-type architectural paint. Indeed, only Textured Coatings of America, Inc. provides exterior water-type paint which are known to contain infrared-reflecting pigment comprising a solid solution having a corundum-hematite crystal lattice structure; i.e., the paint of the present invention. Additionally, the Haines Declaration (Item 11) further describes a newly introduced (i.e., 2006) product line (i.e., VINYLSAFE™ from Sherwin-Williams) which is marketed to prevent warpage of vinyl siding. Thus, even Sherwin-Williams, the largest U.S. paint manufacturer (Haines Declaration Item 11), has apparently not realized the energy savings available by using a method according to the present invention; i.e., painting the exterior vertical walls of a building with a paint having a heat-reflective pigment comprising a solid solution

having a corundum-hematite crystal lattice structure. Accordingly, Applicant has met the burden under *In re Fielder* with respect to consumer demand in a showing of commercial success.

Thus, in full view of considerations regarding market share, time period of comparison, expected sales, advertising, market leadership, recent changes in related technology, and consumer demand, a nexus between the claimed invention and commercial success is established in fulfillment of the requirements of *In re Huang*. Accordingly, Applicant respectfully requests reconsideration and withdrawal of the current rejections.

**All of the rejections are overcome by a showing of unexpected results**

Applicant asserts that the presently claimed invention is not obvious over Sliwinski *et al.* in view of either secondary reference because the claimed invention provides greater than expected results. The Federal Circuit has noted that “[a] greater than expected result is an evidentiary factor pertinent to the legal conclusion of obviousness ... of the claims at issue.” *In re Corkhill*, 711 F.2d 1496, 226 USPQ 1005 (Fed. Cir. 1985). See also MPEP § 716.02(a). Accordingly, Applicant respectfully requests consideration of the attached declaration Andre Desjarlais (the “Desjarlais Declaration”) under 37 C.F.R. § 1.132 (attached hereto as Exhibit 3).

The Desjarlais Declaration is related to the Declaration of Jay A. Haines filed under 37 C.F.R. § 1.132 and provided with the Response to Office Action dated May 2, 2006, at Item 15. The Desjarlais Declaration provides a summary (Exhibit 1 thereof) of a joint research project conducted by the Oak Ridge National Laboratory of the U.S. Department of Energy and Textured Coatings of America, Inc. in the period 2004-2005. See Response to Office Action dated May 2, 2006. The Desjarlais Declaration additionally provides testimony by an expert in the field of architectural energy conservation that it would not have been predicted that simply coating the external vertical walls of a building with the infrared-reflective paint of the present invention would have such a dramatic effect (i.e., 4-21.9%, see Desjarlais Declaration at Item 7 and page 50 of Exhibit 1 therein) on energy savings. As further described in the Desjarlais Declaration (Item 8), the reason for this professional skepticism was that the roof typically takes the majority

of solar radiation impinging on a building; thus, the most efficient use of infrared-reflective paint was thought to be on roofs. The Desjarlais Declaration further describes (Item 8) that the witness was aware of no research directed to energy savings based on heat-reflective coating of exterior vertical walls being conducted in 2004, at the introduction of Supercote IR, and that virtually all research at the time was focused on roof coatings. Accordingly, Applicant further respectfully requests reconsideration and withdrawal of the current rejection.

**Additional rejections under 35 U.S.C. § 103**

The rejections of Claims 18-19, 30 and 34, 31-32, 33, 35, and 34-35 (Office Action pages 5, 6, 7, 9, 10, and 11, respectively), all of which recite Sliwinski *et al.* in view of Krauthauser *et al.* or Yanagimoto *et al.* as the primary and secondary references are not cured by further combination with Tsuda *et al.*, Slama, Krauthauser *et al.*, and Dainippon (JP '406), Abe *et al.* or Gilli, Shelley *et al.*, Beckenhauer, or Krauthauser *et al.* and Dainippon further in view of SUPER COTE TEXTURED PRIMER technical data sheet (11/2003). As previously discussed (Response to Office Action dated May 2, 2006, in view of Office Action dated February 7, 2006), none of the tertiary or quarternary references (*supra*) cure the deficiencies of Sliwinski *et al.* in view of Krauthauser *et al.* or Yanagimoto *et al.* Accordingly, Applicant respectfully requests reconsideration and withdrawal of the current rejections.

### Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application is respectfully requested. In the event that any matters remain to be resolved in view of this communication, the Examiner is encouraged to call the undersigned so that a prompt disposition of this application can be achieved.

No fee is believed due with the present communication. However, the Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 50-0872. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 50-0872. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. § 1.136 and authorizes payment of any such extensions fees to Deposit Account No. 50-0872.

Respectfully submitted,

Date August 24, 2006

By 

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Attorney for Applicant

Attachments:

- Exhibit 1: Declaration of Julie K. Mowery under 37 C.F.R. § 1.132
- Exhibit 2: Declaration of Jay A. Haines under 37 C.F.R. § 1.132
- Exhibit 3: Declaration of André Desjarlais under 37 C.F.R. § 1.132